DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/Ala Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-007729 Address: 333 Burma Road **Date Inspected:** 30-Jun-2009

City: Oakland, CA 94607

OSM Arrival Time: 1900 **Project Name:** SAS Superstructure **OSM Departure Time:** 700 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes No Li Ming, Liu Yang **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** Tower and OBG Components

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector George Goulet was present during the times noted above for observations relative to the work being performed.

OBG Trial Assembly Area

This QA Inspector, George Goulet, randomly observed the following work in progress in the trial assembly area:

Section 1AE, panel point 6 south, lower chevron - ZPMC workers performing what appeared to be final tightening of bolt sets using a calibrated wrench.

Section 1AE, panel point 10 north, lower chevron - ZPMC workers performing what appeared to be final tightening of bolt sets utilizing a hydraulic wrench and using the turn of the nut method.

Bay 10

This QA Inspector, George Goulet, randomly observed the following work in progress in Bay 10:

FCAW welding of weld joint SSTL3-1C/K-63 located on PCMK south tower shaft, lift 3, skin E, at the bottom side of the 89M diaphragm. Welder was identified as 054069. ZPMC QC was identified as Li Ming (QC2). The welding variables recorded by QC2 appeared to comply with WPS-B-T-4333-Tc-P4-F.

FCAW welding of weld joint SSTL3-1G/K-44 located on PCMK south tower shaft, lift 3, skin E, at the bottom

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side of the 99M diaphragm. Welder was identified as 057244. ZPMC QC was identified as QC2. The welding variables recorded by QC2 appeared to comply with WPS-B-T-4333-Tc-P5-F.

FCAW welding of weld joint SSTL3-1G/K-128 located on PCMK south tower shaft, lift 3, skin E, at the top side of the 99M diaphragm. Welder was identified as 203977. ZPMC QC was identified as QC2. The welding variables recorded by QC2 appeared to comply with WPS-B-T-4333-Tc-P5-F.

FCAW welding of weld joint SSTL3-1I/K-131 located on PCMK south tower shaft, lift 3, skin E, at the bottom side of the 109M diaphragm. Welder was identified as 052075. ZPMC QC was identified as QC2. The welding variables recorded by QC2 appeared to comply with WPS-B-T-4332-Tc-P4-F.

SAW welding of weld joints NSD1-FESA4-3A/F-10A, 11A located on PCMK north tower, lift 4, skin E. Welder was identified as 209051. ZPMC QC was identified as CWI Liu Yang (QC3). Assisting QC3 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Inspector Shi Jing Wei, who was not a CWI. The welding variables recorded by QC3 and QC3's assistant appeared to comply with WPS-B-T-2221-Tc-U3c-S-2.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

This QA Inspector, George Goulet, asked each QC monitoring the welding if all the welding variables observed by QC appeared to comply with the appropriate WPS, including the preheat requirements according to thickness of the thickest member being welded. Each QC monitoring the welding showed this QA Inspector, George Goulet, that QC was carrying the proper temperature sticks to monitor the minimum and maximum preheat and interpass temperatures and replied that all QC observed did appear to comply.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, 134-8257-0045, who represents the Office of Structural Materials for your project.

Inspected By:	Goulet,George	Quality Assurance Inspector
Reviewed By:	Carreon, Albert	QA Reviewer